



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

January 11, 2016

Mr. Richard W. Hancock, P.E., Manager
Project Development and Environmental Analysis
NC Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

SUBJECT: Federal Final Environmental Impact Statement (FEIS) and Final §4(f)
Evaluation for the US 70 Havelock Bypass, Craven County, North Carolina; ERP No.:
FHW-E40843-NC; NC Department of Transportation (NCDOT) TIP Project No.: R-
1015; CEQ No.: 20150345

Dear Mr. Hancock:

The U.S. Environmental Protection Agency (EPA) Region 4 Office has completed its review of the above FEIS in accordance with §309 of the Clean Air Act (CAA) and §102(2)(C) of the National Environmental Policy Act (NEPA). The EPA evaluates all draft EISs based on a set of criteria¹, which are the basis for our recommendations to lead agencies for improvements in their FEIS. The EPA rated the draft EIS (DEIS) as an "EC-2" meaning that we had environmental concerns and requested additional information. The proposed US 70 Havelock Bypass will be an approximately 10-mile, multi-lane, median-divided, bypass facility on new location around the City of Havelock, Craven County, North Carolina.

The EPA acknowledges the efforts made by the project proponents to provide updated information on the natural resources located in the project area as well as to revise the preferred alternative to meet the stated purpose and need while reducing impacts to some resources. The EPA has been involved in the proposed project under the NEPA/§404 Merger process since 2001. On April 10, 2012, the EPA re-affirmed the selection of Alternative 3 as the Least Environmentally Damaging Practicable Alternative (LEDPA) based on updated studies. On August 20, 2014, the EPA (along with the NEPA/§404 Merger Team) signed Concurrence Points 4A (Avoidance and Minimization) and 4B (Hydraulic review of all proposed major drainage structures, equalizer pipes, ditches, and other drainage features).

In the 2011 DEIS, Alternative 3 was selected as the LEDPA as it provided the best balance for minimizing impacts to the human and natural environment, comprising the City of Havelock and the Croatan National Forest (CNF), and the ability to perform prescribed burns for sustaining red-cockaded woodpecker (RCW) habitat (from FEIS Table S.1, p. S-7). The FEIS identifies a Preferred Alternative that is a modification of Alternative 3 from the DEIS. This refinement

¹ The USEPA's Environmental Impact Statement Rating System Criteria is located at: <http://www2.epa.gov/nepa/environmental-impact-statement-rating-system-criteria>

incorporates design studies aimed at reducing RCW habitat fragmentation within the CNF. The NCDOT reduced the proposed roadway cross-section to a maximum 200-foot cleared width for a distance of 5,500 feet by reducing the side slopes while maintaining the median and shoulder widths.

The EPA notes the project commitments made in the DEIS and updated or newly-added in the FEIS (i.e., the “Green Sheets”). However, the EPA remains concerned about the magnitude of the project’s potential effects to local ecosystems and communities. Our comments in this letter focus on issues that potentially remain and provides recommendations as identified below:

Socio-economic and Community Impacts: In our comments on the DEIS the EPA expressed concerns with the lack of current census data used in developing the relocation report, assessing environmental justice (EJ) impacts, unemployment rates, and income/poverty levels. The EPA notes that the FEIS used 2010 US Census data to update socioeconomic characteristics. However, it remains unclear whether updated data was used to examine the number of relocations as these figures did not appear to change from the DEIS to the FEIS.

Recommendation: The EPA requests that the transportation agencies provide clarification on this issue during the Merger Team process or in the Record of Decision (ROD).

Solid Waste Disposal Site Relocation: The EPA continues to have environmental concerns regarding solid waste disposal and the relocation/siting of the Craven County Waste Transfer Station. The DEIS did not fully address the potential impact to the City of Havelock or the County and the potential for illegal dumping and disposal of trash and other hazardous materials once the existing facility is removed. The FEIS provides that the NCDOT will coordinate this during right-of-way acquisition and that they are working with Craven County.

Recommendations: Siting new waste disposal facilities is an arduous process. The EPA noted that the failure to coordinate this early in the NEPA process can have the potential to cause substantial delays to the proposed project. The EPA encourages the transportation and local agencies to continue working to site a new solid waste facility for Craven County. The impacts to human and natural environment resources incurred from a new waste facility should also be considered in the total impacts from the proposed bypass project and included in the ROD.

Farmland Impacts: The EPA’s comments on farmland were not addressed in the FEIS. Specifically, the EPA had concerns regarding the lack of information on Statewide and Local Important Farmland. The FEIS did not clarify the information on farmland impacts nor identify any potential issues involved with dissecting active fields within the corridor alignment, access for farm equipment, nor the presence of any Voluntary Agricultural Districts.

Recommendation: Prior to the issuance of the ROD, it is requested by the EPA that the transportation agencies address farmland impact concerns in the Merger Team process.

Jurisdictional Stream and Wetlands: The DEIS Preferred Alternative (Alternative 3) was listed as impacting 2,505 linear feet of streams and 115 acres of wetlands. Alternative 3 also impacts Neuse River Riparian Buffers (NRRB). The FEIS Preferred Alternative (Refined Alternative 3)

impacts 2,948 linear feet of streams and 131 acres of wetlands; total NRRB impacts have also increased. Thus, the impacts to jurisdictional aquatic resources has increased rather than decreased since the issuance of the DEIS and the selection of the LEDPA.

Recommendations: While we understand that the Croatan Wetland Mitigation Bank (CWMB) will be used for compensatory mitigation needs, the EPA requests that the transportation agencies perform additional avoidance and minimization of impacts to waters of the U.S. during final design. Additionally, the EPA also requests that the transportation agencies confirm with the U.S. Army Corps of Engineers that the Refined Alternative 3 is still the LEDPA and that this determination be shared with the EPA and other Merger Team agencies prior to the issuance of the ROD.

Stormwater: Indirect impacts to jurisdictional aquatic resources from stormwater runoff also remains a concern to the EPA. Neither the FEIS Section 4.12.2.2 on Indirect Effects to Aquatic Communities, nor Section 4.13.4 on Stormwater adequately describe specific measures to treat stormwater runoff from the substantial amount of impervious surfaces from the new bypass. The FEIS does not quantify the residual (post-treatment) pollutant loadings nor calculate/estimate effects on water quality, including for large/extreme storm events that exceed the capacity of proposed treatment and detention systems.

Recommendation: Final design, including hydraulic design, should address the EPA's concerns regarding stormwater runoff treatment and take into consideration how the frequency and severity of large/extreme storm events may increase with changing climate.

Groundwater: The DEIS and FEIS note that the Castle Hayne aquifer is within the project study area and serves as the water supply for the City of Havelock via municipal wells. However, the FEIS did not provide a discussion on groundwater quality, quantity, flow rates and direction, recharge areas, aquatic connectivity and ecological function, or whether/how the project would potentially affect these features. Dewatering activities during construction is anticipated where trenches or below-grade cut slopes occur in areas of shallow groundwater. However, the FEIS does not provide the information regarding the estimated volume and/or duration of dewatering activities or a discussion of construction techniques that could avoid or reduce the need for dewatering.

Recommendation: The EPA recommends that the transportation agencies provide supplemental information as described above to improve characterization of groundwater resources, ecological functions, vulnerabilities, and potential impacts during final design for the NEPA/404 Merger Team's 4C hydraulic design review. The EPA recommends that a commitment be provided in the ROD to the appropriate measures that would potentially avoid, minimize, or otherwise mitigate direct and indirect project impacts to important groundwater resources within the project study area.

Croatan National Forest and Terrestrial Forests: Alternative 3 [Preferred Alternative] in the DEIS was noted to impact 240 acres within the CNF. Refined Alternative 3 [the new Preferred Alternative] in the FEIS is also anticipated to impact 240 acres of the CNF. Additionally, the proposed bypass also impacts the South Prong Flatwoods Priority Area and the Havelock Station

Flatwoods and Powerline Corridor Natural Area. The FEIS notes (p. 4-33) that “*most of the mammals documented within the project study area are conspicuous large and medium-sized species that have wide habitat tolerances and commonly occur...highly mobile and wide-ranging species, such as black bears, are also susceptible to road mortality.*” Furthermore, p. 4-37 in the FEIS notes that “*the location of the CWMB augments its benefits to include habitat connectivity to thousands of acres of black bear sanctuary and other natural areas within the CNF.*”

Considering the rural project setting, its proximity to the CNF and other wildlife corridors, and data from similar new location projects, the EPA believes that the proposed bypass project could substantially increase the likelihood for collisions with large mammals, and thereby, decreasing the safety of the new facility.

Recommendations: The EPA reiterates its previous environmental concerns and recommendations regarding proactive measures to minimize clearing in order to reduce impacts to terrestrial forest communities and wildlife habitat. In addition, the EPA also understands that such measures in combination with wildlife over- and/or underpasses and a fencing plan that would coincide with areas of wildlife habitat and movement patterns along the bypass would potentially reduce collisions. Prior to the completion of the final design, the EPA recommends that the aforementioned measures and issues be fully addressed with the Merger team. Furthermore, the EPA encourages the incorporation of context sensitive design into the final roadway design. While the EPA would not anticipate a full fencing for the entire bypass corridor, fencing could be strategically applied through collaboration with the US Fish and Wildlife Service, the US Forest Service/CNF staff, and the NC Wildlife Resources Commission. Such measures would potentially benefit both wildlife and human safety. The EPA recommends that the inclusion of a wildlife management plan in the final design to direct wildlife to appropriate crossing areas and to prevent entry upon the roadways where collisions are most likely to occur. The EPA would recommend that the transportation agencies with the wildlife agencies gather appropriate roadkill data and conduct a landscape analysis to identify areas most in need of preventive measures. For example, the aforementioned agencies could help to identify all locations where animal fatality rates would likely be high, such as between wooded areas and open landscapes.

Climate Change / Greenhouse Gas (GHG) Emissions: The FEIS did not address climate change/GHG emissions. Climate change could have potential effects on transportation infrastructure.

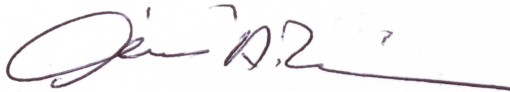
Recommendation: The EPA recommends that the NCDOT and FHWA incorporate scenarios from the National Climate Assessment (NCA), released by the U.S. Global Change Resource Program² as a prediction of how climate change may impact this particular transportation facility. Based on future scenarios, it may be appropriate to incorporate resiliency features to withstand more frequent and/or more intense storm events as well as the impact of temperature extremes on pavement and infrastructure. The EPA recommends considering climate adaption measures based on how future climate scenarios may impact the proposed project during final design, particularly with regard to hydraulic structures. The NCA contains scenarios for regions

² <http://nca2014.globalchange.gov/>

and sectors, including transportation. Using NCA or other peer review-reviewed climate scenarios to inform alternatives analysis and possible changes to the proposal can improve resilience and preparedness for climate change. Changing climate conditions can affect a proposed project as well as the project's ability to meet the designated purpose and need.

The EPA recommends that all impacts to the human and natural environment that have not been fully covered in the FEIS be addressed in the ROD or additional NEPA documentation. Dr. Cynthia F. Van Der Wiele of my staff will continue to work with you as part of the NCDOT Merger Team process. The EPA requests that the Merger team process be fully utilized by the transportation agencies to address remaining environmental concerns as outlined in this letter prior to the issuance of the ROD. The EPA also requests that a copy of the ROD be provided when it becomes available. Should you have any questions concerning these comments, please feel free to contact Dr. Van Der Wiele at vanderwiele.cynthia@epa.gov or (919) 450-6811.

Sincerely,

A handwritten signature in dark ink, appearing to read "Chris D. 2", with a long horizontal line extending to the right.

Christopher A. Militscher, Chief
NEPA Program Office
Resource Conservation and Restoration Division

cc: John F. Sullivan, III, P.E, FHWA- NC
Thomas Steffens, USACE Washington Field Office
Pete Benjamin, USFWS Raleigh Field Office
David Wainwright, NCDEQ, DWR Central Office
Travis Wilson, NCWRC Raleigh